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10/527,241	03/08/2005	Alexander Boldin	BOLDIN/102/PC/US	2845
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply; if any, is set in the attached communication.

Office Action Summary	Application No. 10/527,241	Applicant(s) BOLDIN, ALEXANDER	
	Examiner Dennis P. Joseph	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is responsive to amendments filed in application No. 10/527,241 on October 31, 2007. Claims 1-30 are pending and have been examined.

Claim Rejections – 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. **Claims 1,2,6,7,9-13,24 and 26-30** rejected under 35 U.S.C. 102(b) as being anticipated by Kohei (JP 08-234903), a machine translation of which has been provided with this office action.

Kohei teaches in Claim 1:

A mouse for a computer system, said mouse capable of conveying signals to the computer indicative of movement of said mouse across a working surface and being actuatable by a user to generate a signal to a computer ([0040]), said mouse comprising:

a casing having a bottom part restable on the working surface (Drawing 6, lower housings 2) and an upper part (Drawing 6, upper housing 1), said casing longitudinally extending from a front end to a rear end and having transversely spaced sides which are spaced

so that the casing is positionable between distal phalanxes of a user's ring and little fingers (Drawing 6, the user's fingers are placed around the mouse), and a distal phalanx of a user's thumb when a user's law palm, user's ring and little fingertips, and a side of the distal phalanx of the user's thumb are resting on the working surface without gripping said mouse in the naturally relaxed curled fingers and hand position (Drawing 6, the thumb is placed on the surface);

a primary button depressable relative to said casing and disposed at an upper front portion thereof (Drawing 6, manual operation button 3, [0025]); and

a primary fingertip receptacle (Drawing 6, 8A) at least partially extending upwardly from a surface of said primary button and configured for securely receiving a user's index fingertip and providing a contact lip surface at generally transversely opposed sides and at generally longitudinally opposed portion of a received index fingertip (Drawing 6 shows the manual buttons 3 and 4 on opposite sides which provide a contact surface for the fingers to actuate on), thereby allowing the user to move the mouse in any direction on the working surface without gripping or pinching the mouse with other fingers, said primary button being actuatable by a generally downward forward force applied by said index finger when stretching against said primary receptacle. (Drawing 6 shows left crevice 8A which is the fingertip receptacle for which the finger can actuate movement of the mouse. [0033])

Kohei teaches in Claim 2:

The mouse ([0040]) of claim 1 further comprising:

a secondary button depressable relative to said casing and disposed transversely of said primary button at an upper front portion of said casing (Drawing 6, manual operation button 4, [0025]);

a secondary fingertip receptacle (Drawing 6, crevice 8B) at least partially extending upwardly from a surface of said secondary button and configured for receiving a user's middle fingertip and providing a contact lip surface at generally transversely opposed sides and at generally longitudinally opposed portions of a received middle fingertip, (Drawing 6 shows the manual buttons 3 and 4 on opposite sides which provide a contact surface for the fingers to actuate on) thereby allowing the user to move the mouse in any direction on the working surface without gripping or pinching the mouse with other fingers, said secondary button being actuatable by a generally downward forward force applied by said middle finger against said secondary receptacle (Drawing 6 shows left crevice 8B which is the fingertip receptacle for which the finger can actuate movement of the mouse. [0033]); and

a form of a rear part of said casing providing sufficient clearance between an upper surface and a rear surface of said casing, and a user's palm, and the user's index and middle fingers being placed in the respective receptacle, so that said upper surface and said rear surface of said casing do not interfere with the user's palm and the fingers when the user manipulates said mouse. (Drawing 6, the rear part of the mouse does not interfere with the user's palm as they operate the mouse.)

Kohei teaches in Claim 6:

The mouse ([0040]) of claim 1 wherein said primary receptacle is formed from a molded component comprising a pad and a rounded section, which tapers upwardly from the pad and is symmetric about a medial plane. (Drawing 6, septum 11 which contains the primary receptacle, [0033])

Kohei teaches in Claim 7:

The mouse ([0040]) of claim 2, wherein said secondary receptacle is formed from a molded component comprising a pad and a rounded section, which tapers upwardly from the pad and is symmetric about a medial plane. (Drawing 6, septum 11 which contains the secondary receptacle, [0033])

Kohei teaches in Claim 9:

The mouse ([0040]) of claim 1 wherein the sides of said casing each have a generally concave shape, which define a user's thumb, and a user's ring and little fingertips pinching areas. (Drawing 6, concave housing 1)

Kohei teaches in Claim 10:

The mouse ([0040]) of claim 9, wherein both sides of said casing in a user's thumb and a user's ring fingertip pinching areas are substantially vertical to the working surface over which the mouse moves. (Drawing 6, both sides of the casing are vertical to the working surface.)

Kohei teaches in Claim 11:

The mouse ([0040]) of claim 9, wherein a user's side of the distal phalanx of the thumb and a user's ring and little fingertips being placed on the respective pinching areas register with the working surface over which the mouse moves when a user manipulates the mouse. (Drawing 6, the thumb and little fingers pinch around the upper casing 1)

Kohei teaches in Claim 12:

The mouse ([0040]) of claim 2, wherein a space exists between the user's palm and an upper surface of the rear part of the casing when the user shifts the mouse by stretching or bending the user's index and middle fingers placed in the respective receptacles. (Drawing 6, there is space above the septum 11 for which the fingers can be placed in the crevices.)

Kohei teaches in Claim 13:

The mouse ([0040]) of claim 2 wherein a length of the rear part of the casing measured from the front edge of said primary and secondary receptacles allows a user to shift the mouse

from a neutral position of the user's finger by bending the user's index and middle fingers further in a pocket formed by the user's hand. ([0011], the mouse can be moved via the fine motion by the fingertip)

Kohei teaches in Claim 24:

The mouse ([0040]) of claim 2, wherein said primary and secondary buttons each are parts of ends of levers, which longitudinally extend from a common plate on which other ends of the levers are firmly fixed. (Drawing 6, the buttons 3 and 4 are ends of the upper housing.)

Kohei teaches in Claim 26:

The mouse ([0040]) of claim 24 wherein said common plate defines a horizontal plane. (Drawing 6, the common plate holds the manual buttons and the septum and is on a horizontal plane.)

Kohei teaches in Claim 27:

The mouse ([0040]) of claim 24, wherein said casing has a cross panel in relation to said sides and said common plate is inclined toward said front end relative to said cross panel. (Drawing 6 shows the septum to be on an incline.)

Kohei teaches in Claim 28:

The mouse ([0040]) of claim 1 further comprising a mouse movement sensing system wherein a sensor thereof is located on said bottom part rearwardly from said primary receptacle along a central longitudinal axis of said casing. (Kohei, [0040])

Kohei teaches in Claim 29:

A computer mouse ([0040]) for a computer system, wherein said mouse has a casing with at least one button depressable (Drawing 6, buttons 3 and 4) relative to said casing and disposed at an upper portion thereof to generate a signal to the computer, characterized in that a molded component is mounted to an upper surface of the button and is configured to form a receptacle having the shape of a fingertip of a user. (Drawing 6, septum 11 on which the receptacles are formed over the manual buttons.)

Kohei teaches in Claim 30:

The mouse ([0040]) of claim 29, wherein there are two buttons (Drawing 6, manual buttons 3 and 4), characterized in that a molded component is mounted to an upper surface of each button to whereby one component is configured to form a receptacle having the shape of an index finger of a user and the second molded component is configured to form a receptacle having the shape of a middle fingertip of a user. (Drawing 6, septum 11 on which the receptacles are formed over the manual buttons.)

Claim Rejections – 35 USC § 103

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 103(a) that forms the basis for the rejections under this section made in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. **Claims 3,4,5,8,14-23 and 25** rejected under 35 U.S.C. 103(a) as being unpatentable over Kohei (JP 08-234903) in view of Smith (6,348,912 B1)

As per Claim 3:

The mouse (Kohei, [0040]) of claim 2, but

Kohei does not explicitly teach the mouse is “further comprising a wheel button disposed between the primary receptacle and the secondary receptacle, said wheel button accessible by at least one of the user's finger when a user's index finger and a user's middle finger are placed in the respective receptacle of the primary and secondary buttons.”

However, in the same field of endeavor, mice, Smith teaches “A scroll wheel 22 having a plurality of ridges 23 on its outer circumference is further provided amid the buttons 14, 16, 18, 20” (Smith, Column 2, Line 13)

Therefore, it would have been obvious to a person with ordinary skill in the art at the time of the invention to integrate the use of the scroll wheel as taught by Smith between the receptacles and on the septum of Kohei’s mouse with the motivation that it can “enable an operator to scroll a computer screen without using the buttons 14, 16, 18, 20.” (Smith, Column 2, Line 14) This makes the navigating of a computer much more convenient.

Kohei and Smith teach in Claim 4:

The mouse (Kohei, [0040]) of claim 2, wherein the primary and secondary receptacles are located on the primary button and the secondary button (Drawing 6 shows the crevices 8A and 8B on the primary and secondary buttons), respectively, so that a gap between the user's index finger and the user's middle finger being placed in the respective receptacles has a spacing distance, which allows a wheel button to be positioned between them. (The combination of Kohei and Smith teaches of placing the scroll wheel in between the primary and secondary buttons.)

Kohei and Smith teach in Claim 5:

The mouse (Kohei, [0040]) of claim 3, wherein each said receptacle has a front portion and a center of said wheel is disposed rearwardly from the front portions of said receptacles. (

The combination of Kohei and Smith teaches of placing the scroll wheel in between the primary and secondary buttons and thus, in between the receptacles which are on top of these buttons.)

Kohei and Smith teach in Claim 8:

The mouse (Kohei, [0040]) of claim 4, wherein the user's index and middle fingertips being placed in respective receptacles are elevated from the working surface at a height, which is reduced and substantially defined by an outside diameter of said wheel. (Drawing 6 shows the septum 11 to be at an elevated height. The combination of Kohei and Smith teaches of placing the scroll wheel on the septum.)

Kohei teaches in Claim 14:

The mouse (Kohei, [0040]) of claim 1, wherein a lip contact surface is at least partially defined (Drawing 6 shows the manual buttons 3 and 4 on opposite sides which provide a contact surface for the fingers to actuate on); but

Kohei does not explicitly teach that for the mouse, "at least one additional button having a user's index finger contact area and disposed rearwardly from said primary receptacle so as to be capable of being actuated by bending the user's index finger positioned in said primary receptacle and simultaneous pinching the mouse between a user's thumb and a user's ring and/or little fingertips."

However, in the same field of endeavor, mice, Smith teaches “Provided adjacent to and behind the buttons 14, 16 are a pair of supplemental buttons 18, 20.” (Column 2, Line 9) Figure 1 shows the supplemental buttons 18 and 20.

Therefore, it would have been obvious to a person with ordinary skill in the art at the time of the invention to integrate the use of the supplemental buttons as taught by Smith on the receptacles of Kohei’s mouse with the motivation that “The supplemental buttons 18, 20 are provided to allow ease of use of the mouse 10 by operators having small hands, such as children or people of slight stature.” The user’s fingers bend in order to actuate the supplemental buttons.

Kohei and Smith teach in Claim 15:

The mouse (Kohei, [0040]) of claim 14, wherein a contact portion of the primary receptacle and the index finger contact area of the additional button together form a contact shape that substantially conforms to the shape of the distal phalanx of the user's index finger. (The combination of Kohei and Smith teaches of placing the additional button in a reasonable range of the distal phalanx of the index finger so it can actuate in both directions.)

Kohei and Smith teach in Claim 16:

The mouse (Kohei, [0040]) of claim 15, wherein a surface of the contact portion of the primary receptacle is substantially level with a surface of the index finger contact area of the additional button at all points along a boundary between the primary receptacle and the index

finger contact area of the additional button. (The combination of Kohei and Smith teaches of placing the additional button in a reasonable range of the distal phalanx of the index finger so it can actuate in both directions.)

Kohei and Smith teach in Claim 17:

The mouse (Kohei, [0040]) of claim 14, wherein an interior portion of the distal phalange of the user's index finger contacts both a front portion of said primary receptacle and a portion of the contact area of the additional button when the user's index fingertip is positioned in said primary receptacle. (The combination of Kohei and Smith teaches of placing the additional button in a reasonable range of the distal phalanx of the index finger so it can actuate in both directions.)

Kohei and Smith teach in Claim 18:

The mouse (Kohei, [0040]) of claim 14, wherein said additional button is actuated by bending the index finger and simultaneously pinching the sides of the mouse between the user's thumb and the user's ring and/or little fingertips. (The combination of Kohei and Smith teaches of placing the additional button in a reasonable range of the distal phalanx of the index finger so it can actuate in both directions. In order to actuate the additional button, the finger would be bent inward.)

Kohei teaches in Claim 19:

The mouse (Kohei, [0040]) of claim 2, in which a lip contact surface is at least partially defined (Drawing 6 shows the manual buttons 3 and 4 on opposite sides which provide a contact surface for the fingers to actuate on); but

Kohei does not explicitly teach that for the mouse, “a second additional button having a middle finger contact area and disposed rearwardly from said secondary receptacle so as to be capable of being actuated by bending the user's middle finger positioned in said secondary receptacle and simultaneous pinching the mouse between a user's thumb and a user's ring and/or little fingertips.

However, in the same field of endeavor, mice, Smith teaches “Provided adjacent to and behind the buttons 14, 16 are a pair of supplemental buttons 18, 20.” (Column 2, Line 9) Figure 1 shows the supplemental buttons 18 and 20.

Therefore, it would have been obvious to a person with ordinary skill in the art at the time of the invention to integrate the use of the supplemental buttons as taught by Smith on the receptacles of Kohei’s mouse with the motivation that “The supplemental buttons 18, 20 are provided to allow ease of use of the mouse 10 by operators having small hands, such as children or people of slight stature.” The user’s fingers bend in order to actuate the supplemental buttons.

Kohei and Smith teach in Claim 20:

The mouse (Kohei, [0040]) of claim 19, wherein a contact portion of the secondary receptacle and the middle finger contact area of the second additional button together form a contact shape that substantially conforms to the shape of the distal phalanx of the user's middle finger. (The combination of Kohei and Smith teaches of placing the additional button in a reasonable range of the distal phalanx of the index finger so it can actuate in both directions.)

Kohei and Smith teach in Claim 21:

The mouse (Kohei, [0040]) of claim 20, wherein a surface of the contact portion of the secondary receptacle is substantially level with a surface of the middle finger contact area of the second additional button at all points along a boundary between the secondary receptacle and the middle finger contact area of the second additional button. (The combination of Kohei and Smith teaches of placing the additional button in a reasonable range of the distal phalanx of the index finger so it can actuate in both directions.)

Kohei and Smith teach in Claim 22:

The mouse (Kohei, [0040]) of claim 19, wherein an interior portion of the distal phalange of the user's middle finger contacts both a front portion of said secondary receptacle and a portion of the contact area of the second additional button when the user's middle fingertip is positioned in said secondary receptacle. (The combination of Kohei and Smith teaches of

placing the additional button in a reasonable range of the distal phalanx of the index finger so it can actuate in both directions.)

Kohei and Smith teach in Claim 23:

The mouse (Kohei, [0040]) of claim 19, wherein said second additional button is actuated by bending the middle finger and simultaneously pinching the sides of the mouse between the user's thumb and the user's ring and/or little fingertips. (The combination of Kohei and Smith teaches of placing the additional button in a reasonable range of the distal phalanx of the index finger so it can actuate in both directions. In order to actuate the additional button, the finger would be bent inward.)

Kohei and Smith teach in Claim 25:

The mouse (Kohei, [0040]) of claim 19, wherein said additional buttons each are moveably fixed on said common plate. (Smith, Figure 2, the additional buttons are fixed on the mouse. The combination of Kohei and Smith teaches to add the additional buttons.)

Response to Arguments

6. Applicant's arguments considered, but are not respectively not persuasive.

As for Applicant's arguments that Kohei does not teach of a contact lip surface, Drawing 6 shows a contact surface above manual buttons 3 and 4 and these provide a contact area for the

user's fingers to operate the buttons and move the mouse without the use of the hand, resulting in delicate actuation with just the fingertips. ([0039] and [0041] of detailed specification) As disclosed in Applicant's Figures 1 and 2, there is a contact area above additional buttons 129 and 130 which show two different angles to provide for easier actuation of the mouse. However, these aren't claimed, so using the broadest reasonable interpretation, Kohei does indeed teach of a contact surface on opposite traversable sides.

As a result, this argument is respectively considered to not be persuasive.

Conclusions

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis P. Joseph whose telephone number is 571-270-1459. The examiner can normally be reached on Monday-Friday, 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on 571-272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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DJ

AMR A. AWAD
SUPERVISORY PATENT EXAMINER

